



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/822,186	03/20/97	RUEGER	CRP-137

PATENT ADMINISTRATOR  
CREATIVE BIOMOLECULES INC  
45 SOUTH STREET  
HOPKINTON MA 01748

HM11/1117

EXAMINER
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ROME, D

ART UNIT	PAPER NUMBER
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1646

DATE MAILED: 11/17/98

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Advisory Action**

Application No.

08/822,186

Applicant(s)

Rueger et al.

Examiner

*David S. Romeo* 11/13/88  
David S. Romeo

Group Art Unit

1646

THE PERIOD FOR RESPONSE: [check only a) or b)]

- a) ☐ expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ expires either three months from the mailing date of the final rejection, or on the mailing date of this Advisory Action, whichever is later. In no event, however, will the statutory period for the response expire later than six months from the date of the final rejection.

Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a), the proposed response and the appropriate fee. The date on which the response, the petition, and the fee have been filed is the date of the response and also the date for the purposes of determining the period of extension and the corresponding amount of the fee. Any extension fee pursuant to 37 CFR 1.17 will be calculated from the date of the originally set shortened statutory period for response or as set forth in b) above.

- ☐ Appellant's Brief is due two months from the date of the Notice of Appeal filed on \_\_\_\_\_ (or within any period for response set forth above, whichever is later). See 37 CFR 1.191(d) and 37 CFR 1.192(a).

Applicant's response to the final rejection, filed on Nov 3, 1998 has been considered with the following effect, but is NOT deemed to place the application in condition for allowance:

- ☒ The proposed amendment(s):

- ☐ will be entered upon filing of a Notice of Appeal and an Appeal Brief.
- ☒ will not be entered because:
- ☒ they raise new issues that would require further consideration and/or search. (See note below).
  - ☐ they raise the issue of new matter. (See note below).
  - ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal.
  - ☐ they present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: The proposed amendment would require consideration and search of "repair of endochondral bone", "non-synthetic, non-polymeric matrix", "chondral defects", which are limitations not previously examined.

- ☐ Applicant's response has overcome the following rejection(s):

- ☐ Newly proposed or amended claims \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment cancelling the non-allowable claims.

- ☒ The affidavit, exhibit or request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See the Attachment.

- ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

- ☒ For purposes of Appeal, the status of the claims is as follows (see attached written explanation, if any):

Claims allowed: noneClaims objected to: noneClaims rejected: 1-33, 35, and 36

- ☐ The proposed drawing correction filed on \_\_\_\_\_ ☐ has ☐ has not been approved by the Examiner.

- ☐ Note the attached Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

- ☐ Other

*Elizabeth C. Kemmerer*ELIZABETH KEMMERER  
PRIMARY EXAMINER

Art Unit: 1646

### DETAILED ACTION

The rejection of claims 2-4 under 35 U.S.C. § 112, first paragraph.

Applicants argue that the specification complies with the legal standard of 35 U.S.C. § 112, first paragraph. Applicants' arguments have been fully considered but they are not  
5 persuasive for reasons of record. See the last Office action at page 3, line 13 through page 4, line 4.

The rejection of claims 1, 7-15, 20-22 and 24 under 35 U.S.C. 102(b) as being anticipated by Amman et al. (A).

Applicants argue (1) that TGF- $\beta$  is not capable of inducing local endochondral bone or  
10 cartilage formation, and (2) that Amman et al. do not teach the use of an osteogenic protein capable of inducing the repair of endochondral bone. Applicants' arguments have been fully considered but they are not persuasive because (1) the claims do not require the induction of local endochondral bone or cartilage formation, (2) Applicants arguments are directed to the proposed claims, which will not be entered.

15 The rejection of claims 23 and 24 under 35 U.S.C. 102(b) as being anticipated by Lindstrom et al. (B).

Applicants arguments are the same as those set forth in the preceding paragraph, and those arguments are not persuasive for the reasons set forth in the preceding paragraph.

Art Unit: 1646

The rejection of claims 1-4 under 35 U.S.C. 102(b) as being anticipated by Kuberasampath et al. (AA).

Applicants argue that Kuberasampath et al. does not disclose a device comprising a non-synthetic, non-polymeric matrix other than demineralized bone. Applicants' arguments have been  
5 fully considered but they are not persuasive because (1) Applicants arguments are directed to the proposed claims, which will not be entered, and (2) Applicants' preferred matrix is collagen (see the instant specification at page 7, full paragraph 1) and Kuberasampath et al's. matrix comprises collagen.

The rejections of the claims under 35 U.S.C. 103(a), see page 8, full paragraph 1, of Applicants  
10 response.

Applicants traverse these rejections to the extent they are maintained over the claims as amended and the arguments presented herein. Applicants' arguments have been fully considered but they are not persuasive because Applicants arguments are directed to the proposed claims, which will not be entered, and for the reasons set forth herein.

15 The rejection of claims 1 and 9 under 35 U.S.C. 103(a) as being unpatentable over Amman et al. in view of LeGeros et al. (CS, cited by Applicants).

Applicants argue that Amman et al. and LeGeros do not teach the use of an osteogenic protein as claimed. Applicants' arguments have been fully considered but they are not persuasive

Art Unit: 1646

because Applicants arguments are directed to the proposed claims, which will not be entered, and for the reasons set forth herein.

The rejection of claim(s) 1, 20-22, 32 and 33 under 35 U.S.C. 103(a) as being unpatentable over Amman et al. (A).

5 Applicants argue that Amman et al. do not teach or suggest the use of an osteogenic protein. Applicants' arguments have been fully considered but they are not persuasive because Applicants arguments are directed to the proposed claims, which will not be entered, and for the reasons set forth herein.

DR  
11/13/98

10 The rejection of claim(s) 1, 5, 17-19 and 26-31 under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (CD, cited by Applicants) in view of O'Leary et al. (C).

Applicants argue that there is no motivation to combine the cited references because (1) O'Leary never contemplated using collagen and CMC together, (2) one of ordinary skill in the art relying on Cook et al. would not be motivated to modify a collagen and OP-1 containing composition, (3) the addition of CMC would not be made to address the problem of matrix separating from carrier, as taught by O'Leary. Applicants' arguments have been fully considered but they are not persuasive because (1) it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art, (2) Cook et al teaches a BMP, i.e. OP-

Art Unit: 1646

1, and one of ordinary skill in the art at the time would be motivated to substitute the teachings of O'Leary et al. in the method of Cook et al. in order to achieve the improved suspension-keeping characteristics of the composition, as taught by Cook et al. Furthermore, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. (3) O'Leary et al. teach CMC is useful for addressing the problem of matrix separating from carrier.

The rejection of claim(s) 1, 15-19 and 25 under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (CD, cited by Applicants) in view of O'Leary et al. (C), as applied to claims 1, 17-19 above, and further in view of Kuberasampath et al. (AE, cited by Applicants).

Applicants argue that there is no motivation to combine the teachings of Cook et al. and O'Leary et al. to make the invention of claim 1, as amended, and claim 17. Applicants' arguments have been fully considered but they are not persuasive. The motivation to combine the teachings of Cook et al. and O'Leary et al. were discussed in the preceding paragraph. Furthermore, Applicants arguments are directed to the proposed claims, which will not be entered.

The rejection of claim(s) 1 and 6 under 35 U.S.C. 103(a) as being unpatentable over Kuberasampath et al. (UU) as applied to claim 1 above, and further in view of Ogawa et al. (U).

Applicants argue that neither Kuberasampath et al. nor Ogawa et al. teach all the elements of claim 1, as amended. Applicants' arguments have been fully considered but they are not

Art Unit: 1646

persuasive because Applicants arguments are directed to the proposed claims, which will not be entered.

Claims 35 and 36.

Applicants argue the examiner neither allowed nor rejected claims 35 and 36. Applicants' arguments have been fully considered but they are not persuasive because claims 35 and 36 were rejected at page 6, lines 6-10, of the last Office action (Paper No. 9)

Art Unit: 1646

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Romeo whose telephone number is (703) 305-4050. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5:00 p.m.

5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lila Feisee, can be reached on (703) 308-2731.

Official papers filed by fax should be directed to (703) 308-4242.

Faxed draft or informal communications should be directed to the examiner at (703) 308-0294.

10 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

*Elizabeth C. Kemmerer*

ELIZABETH KEMMERER  
PRIMARY EXAMINER

DSR *DSR*

November 14, 1998